



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 993,661	11 27 2001	Bengt-Erik Olsson	003300-874	8044

7590 07 09 2003

Benton S. Duffett, Jr.  
BURNS, DOANE, SWECKER & MATHIS, L.L.P.  
P.O. Box 1404  
Alexandria, VA 22313-1404

EXAMINER

BROWN, KHALED

ART UNIT PAPER NUMBER

2877

DATE MAILED: 07 09 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/993,661

Applicant(s)

OLSSON ET AL.

Examiner

Khaled Brown

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12 and 14-30 is/are rejected.
- 7) ☒ Claim(s) 7 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the polarization control module and spectrometer module being connected to a single control unit as claimed in claim 20 must be shown or the feature(s) canceled from the claim(s) (Note: Fig 7 shows the two elements connected to two different control units i.e. #7 and #15). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 14, 15, 17, 18, 20-23, 25, 28, 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Melman et al (US 6404537).

Re clms 1, 14: Melman et al discloses a spectrometer module comprising: an input (302), a variable differential group delay (DGD) element (304) and a detector (306).

Re clms 14, 15, 17: The limitations of claims 14, 15, 17 are inherent

Re clm 18: detected signals processed (Col 5 lines 55-56)

Re clms 20, 25: Melman et al discloses a monitor module comprising: a polarization control module (302) being connected with a control unit (308), a spectrometer module (304) being connected with the control unit and a polariser (14) being placed between the polarization control module and spectrometer module.

Re clm 21: an input (202)

Re clm 22: a first element (10) and a second element (12)

Re clm 23: Non-alignment (fig. 4)

Re clms 28, 29: Melman et al discloses a method of monitoring and measuring properties comprising the steps of: inputting an optical signal to a variable DGD

Art Unit: 2877

element, applying a variable birefringence retardation to the incoming optical signal by letting it pass the variable DGD element, and detecting the power of the signal exiting the variable DGD element, having a determined state of polarization (Col 5 line 38 – Col 6 line 14).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6,8, 9-12,16 and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Melman et al (US 6404537).

Re clms 2-6,9,10-12,16 24: Melman et al discloses the claimed invention having a DGD element except Melman et al does not disclose the particular design of the DGD element. It would have been an obvious matter of design choice to use the claimed design of the DGD element, since applicant has not disclosed that any particular design of a DGD element solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any design for the DGD element disclosed by Melman et al.

Re clm 8: incoming optical signal is divergent (implied by the need for lens 206)

Claims 19, 26, 27 and 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melman et al (US 6404537) in view of Rossi et al "Optical Performance Monitoring in Reconfigurable WDM Optical Networks Using Sub-carrier Multiplexing" (Journal of Lightwave Technology, Vol 18, No. 12, pp. 1639-1648 (2002)).

Re clm 19: Melman et al discloses a spectrometer device as described above. However Melman et al does not specifically disclose an optical signal being split and sent to a first and second spectrometer device. Rossi et al teaches an optical signal being split and sent to a first and second spectrometer device because it allows a fiber communications network to be managed (Rossi et al Fig 2). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the optical signal from the communication system of Melman et al split and sent to a first and second spectrometer device as taught by Rossi et al because it would allow the fiber communications network to be managed.

Re clms 26, 27, 30: Melman et al discloses a monitoring system comprising: a monitoring stations as described above for monitoring a fiber communications network. However Melman et al does not specifically disclose placing multiple monitoring systems along a fiber communications network, the monitoring stations being positioned between two network elements and the output of the monitoring systems going to a hub. Rossi et al teaches placing multiple monitoring systems along a WDM fiber communications network, the monitoring stations being positioned between two network elements and the output of the monitoring systems going to a hub because it allows a fiber communications network to be managed. Therefore it would have been obvious to

a person of ordinary skill in the art at the time the invention was made to place multiple Melman et al monitoring systems along a fiber communications network in the manner taught by Rossi et al because it would allow the fiber communications network to be managed.

***Allowable Subject Matter***

Claims 7 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose or suggest the claimed structure of a lens or a polarizer between the variable DGD element and the Detector unit in conjunction with the rest of the claimed subject matter.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Farley et al 6559991, Epworth et al 6483620, Chowdhury et al 6417948, Fishman et al 6411750 and Fishman et al 6330375.

Note: a signed copy of the IDS filed 11-27-01 is attached to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khaled Brown whose telephone number is 703-306-5738. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

KB  
June 19, 2003

  
Frank Font  
Supervisory Patent Examiner  
Art Unit 2877